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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/591,683

09/05/2006

Young SEO

1-36919

1478

43935

7590

03/16/2009

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EXAMINER

SULLIVAN, DEBRA M

ART UNIT

PAPER NUMBER

3725

NOTIFICATION DATE

DELIVERY MODE

03/16/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/591,683	Applicant(s) SEO, YOUNG	
	Examiner Debra M. Sullivan	Art Unit 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/26/2006</u> . | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION***Double Patenting***

Applicant is advised that should claim 2 be found allowable, claim 4 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Thoms et al (US Patent # 5,377,520). Thoms et al discloses an apparatus (1') for forming an article from a blank of sheet metal (8) comprising a first die member (7') having a cavity (2') formed therein, means for producing a magnetic field (23) disposed adjacent the cavity in the die (7') for restraining movement of the blank of sheet metal (8) [See col. 4 lines 56-60], a second die member (3') for reciprocal movement toward and away from cavity (2') formed in the first die member (7'), means for imparting selective reciprocal movement of the second die member (3') [See col. 4 lines 8-14 and control means for selectively energizing the means for producing a magnetic field to restrain movement of the blank of sheet metal (8) during the reciprocal movement of the second die (3') [See col. 6 lines 16-20, it is noted that it is inherent that the

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means for producing a magnetic field is controlled by a control means in order to activate and deactivate the magnetic field].

In reference to claims 2 and 4, Thoms et al further discloses the means for producing a magnetic field includes a plurality of electromagnets (23) [See col. 4 lines 56-60].

In reference to claims 3 and 5, the cavity (2') includes an open end, as seen in figure 5.

In reference to claim 6, Thoms et al further discloses the electromagnets (23) are disposed in spaced relation about the open end of the cavity (2'), as seen in figure 5.

In reference to claim 7, it is inherent that the device of Thoms et al includes a control means having a microprocessor for controlling the strength of the magnetic field produced by the electromagnets (23) since the activation and deactivation of the electromagnets (23) corresponds to the movement of the gripper spider (9) and the magnetic field has to be sufficient to maintain the sheet blank (8) in the pre-formed shaped [See col. 6 lines 16-20]/

In reference to claim 8, it is inherent that the device of Thoms et al includes a control means that has a source of power coupled to the electromagnets (23) through the microprocessor in order to activate and deactivate the electromagnets (23).

In reference to claim 11, Thoms et al discloses a method for forming an article from a blank of sheet metal (8) including the steps of providing a first die member (7') having a cavity (2') formed therein, disposing a plurality of electromagnets (23) in spaced relation about the cavity (2') in the die (7') for restraining movement of the blank of sheet metal (8) [See col. 4 lines 56-60], positioning a blank of sheet metal (8) over the cavity (2') of the first die member (7'), providing a second die member (3') mounted for reciprocal movement toward and away from the cavity (2') formed in the first die member (7'), providing means for imparting selective

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reciprocal movement of the second die member (3') [See col. 4 lines 8-14] and selectively energizing the electromagnets (23) to restrain movement of the blank of sheet metal (8) during the reciprocal movement of the second die (3') [See col. 6 lines 16-20; FIG 5].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thoms et al in view of Stuart (US Patent # 5,212,977). Thoms et al discloses the invention substantially as claimed except for wherein the control means includes an armature means cooperating with the electromagnets and the armature means includes a separate armature with each electromagnet. However, Stuart teaches that it is known in the electromagnetic art to provide a control means having a separate armature (146) for each electromagnet (142) in order to control the current supplied to the electromagnet to achieve the desired holding force [See col. 8 lines 3-13]. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the control means of Thoms et al to include a separate armature for each electromagnet in order to control the current supplied to the electromagnets to be sufficient to provide the desired holding force for the blank of sheet metal.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Debra Sullivan whose telephone number is (571) 272-1904. The examiner can normally be reached Monday - Thursday 10am - 8pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dana Ross can be reached at (571) 272-4480. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Debra M Sullivan/
Examiner, Art Unit 3725

/Dana Ross/
Supervisory Patent Examiner, Art Unit 3725